

REMARKS

The Office Action mailed on February 12, 2004, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-20 were pending in the present application. By this paper, Applicants have cancelled claim 5 and added claims 21-27. Therefore, claims 1-4 and 6-27 are now pending in the present application.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

Objections to the Drawings

In the Office Action, the drawings are objected to as allegedly failing to show every feature of the invention specified in the claims. Specifically, the Office Action states that “the mounting orifices with substantially elongate or oblong shape . . . must be shown.” Applicants respectfully submit that, among other figures, Fig. 3, Fig. 4 and, most eminently, Fig. 5 shows the claimed features. Reconsideration of the drawings is respectfully requested.

Also, the Office Action states that the “indexing means comprising a rack must be shown.” Applicants respectfully submit that Fig. 8 shows a rack 121. Reconsideration of the drawings is respectfully requested.

Specification Objections

In the Office Action, the specification was objected to. As seen above, Applicants have amended the specification, including adding an abstract. Reconsideration is respectfully requested.

Claim Objections

In the Office Action, claims 1, 2, 7 and 15 are objected to as containing informalities. As seen above, claims 1, 2, 7 and 15 have been amended, and reconsideration is respectfully requested.

Applicants thank Examiner Quan for suggesting changes to the claims that would remove the claim objections.

Further, claim 3 is objected to as being of improper dependent form. Applicants respectfully submit that claim 3 presents limitations that further limit the subject matter claimed in claim 1. Specifically, that the device has two identical vessels. Because claim 1 does not contain such a limitation, claim 3 is therefore more narrow than claim 1. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claim 9 was rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In response, Applicants remind the PTO that a claim filed with the original application provides its own written description. (See MPEP §2163.06(III)). Applicants also note that the only amendment to claim 9, prior to placing claim 9 into independent form by the above amendment, was to eliminate the multiple dependencies of claim 9. That is, the language and subject matter of claim 9 with respect to previously pending claim 1 remains exactly the same as it was on the filing date of the application. Therefore, the specification, at the time of filing, necessarily contained (and still contains) a conveyance that the inventor was in possession of the invention of claim 9. Thus, claim 9 cannot represent new matter.

Further in response, Applicants respectfully submit that the rack shown in the figures and described in the specification is, in fact, part of the indexing means. This rack cooperates with toothed wheel 122 such that upon opening the lid 109, the plate is indexed. See pages 15 and 16 of the specification and Fig. 8 for further detail.

If the PTO intends to maintain the rejection of claim 9 under 35 U.S.C. §112, first paragraph, Applicants respectfully request that the examiner call Applicants' representative at

(202) 295-4747

so that Applicants' representative may further explain how the indexing means can indeed comprise a rack, in view of the teachings of the specification.

Rejections Under 35 U.S.C. §112, Second Paragraph

In the Office Action, claims 1-20 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. As seen above, claims 1, 2, 11, 13, 15 and 18-20 have been amended, and Applicants respectfully request reconsideration.

In regard to claim 17 and amended claims 11, 13 and 15, Applicants respectfully submit that the claim recitation "about" is not indefinite. Applicants rely on MPEP §2173.05(b)(A), which states that the "term 'about' used to define the area of the lower end of a mold as between 25 to about 45% of the mold entrance was held to be clear, but flexible." Thus, claim 17 is not indefinite, and the amendments to claims 11, 13 and 15 also do not render those claims indefinite. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 102

Claims 1, 2, 4-7, 10-14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kobayashi (USP 5,322,497). In response, Applicants respectfully traverse the rejection of claims 1, 4, 6, 7, 10-12 and 14, and, in order to advance prosecution, amend claim 2. Therefore, applicants respectfully submit that claims 1, 2, 4-7, 10-14 claims are allowable for the reasons that follow.

Applicants rely on MPEP § 2131, entitled "Anticipation – Application of 35 U.S.C. 102(a), (b), and (e)," which states that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." It is respectfully submitted that Kobayashi does not describe each and every element of independent claim 1 and amended independent claim 2.

Claim 1 and its Dependencies: Claim 1 recites that the claimed centrifuging device includes a horizontal plate with a plurality of through orifices provided on its surface, where the through orifices have “a substantially elongate shape with front and rear walls inclined at an acute angle of less than 90 degrees relative to the horizontal.” (Emphasis added.) An exemplary embodiment of the invention of claim 1 is shown in Fig. 5 of the specification.

Applicants respectfully submit that these elements are not described in Kobayashi; neither expressly nor inherently. Indeed, the Office Action does not allege the contrary, and thus fails to identify where in Kobayashi such a teaching is found. Therefore, because each and every element of claim 1 is not found in Kobayashi, claim 1 and its dependencies (claims 4, 6, 7, 10-12 and 14) are allowable in view of Kobayashi.

The Office Action alleges that there are “through orifices” on the alleged plate of Kobayashi “for mounting of containers (8).” (Office Action, page 11, line 8.) It appears that the Office Action assumes that there are orifices in the side of element 6 of Kobayashi to receive the lug shafts 7a of Kobayashi. Applicants first respectfully submit that Kobayashi is silent in regard to such a teaching. Kobayashi does not describe how the lug shafts communicate with element 6 of Kobayashi. It is quite possible that lug shafts 7a could snap into the arms of element 6 (such as by way of example shown in Appendix A of this paper). Thus, Kobayashi fails to teach, either expressly or inherently, orifices that extend from one side of a plate to the other. Furthermore, assuming *arguendo* that Kobayashi utilizes “through orifices,” to mount containers 8 to element 6, these alleged through orifices do not extend from a bottom of a horizontal plate to the top of a horizontal plate, since the lug shafts appear to extend in the horizontal plane. Withdrawal of the rejection of these claims is respectfully requested.

Claim 2 and its Dependencies: Claim 2 has been amended to include the recitations of claim 5, and to add clarifying language regarding the orifices. As amended, claim 2 recites that the “plate is provided with through orifices that extend from the bottom of the horizontal plate to the top of the horizontal plate adapted for the mounting of tubes.” (Emphasis added.) An exemplary embodiment of such a feature may be found in Fig. 5 of the specification. As can clearly be seen from Fig. 5, orifices extend from the bottom of the plate 104 to the top of the plate 104, and are adapted to permit tubes to be mounted in the orifices.

Kobayashi fails to describe this element. As noted above, the Office Action alleges that there are “through orifices” on the alleged plate of Kobayashi “for mounting of containers (8).” (Office Action, page 11, line 8.) It appears that the Office Action assumes that there are orifices in the side of element 6 of Kobayashi to receive the lug shafts 7a of Kobayashi. Applicants first respectfully submit that Kobayashi is silent in regard to such a teaching. Kobayashi does not describe how the lug shafts communicate with element 6 of Kobayashi. Applicants again note that it is quite possible that lug shafts 7a could snap into the arms of element 6 (such as by way of example shown in Appendix A of this paper). Thus, Kobayashi fails to teach, either expressly or inherently, orifices that extend from one side of a plate to the other. Furthermore, assuming *arguendo* that Kobayashi utilizes “through orifices,” to mount containers 8 to element 6, these alleged through orifices do not extend from a **bottom** of a horizontal plate to the **top** of a horizontal plate, since the lug shafts appear to extend in the horizontal plane. Allowance of claim 2 and dependent claim 13 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103(a)

In the Office Action, Claims 1, 5-8, 10-12, and 14-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Brimhall (USP 5,665,047) in view of Kobayashi, while claims 1, 2, 4-7, 10-14 stand rejected under the same statute as being obvious in view of Kobayashi. Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kobayashi in view of Davidson. Finally, claims 3 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Brimhall or Kobayashi in view of Goodman, and claims 18 and 19 are rejected under the same statute as being obvious in view of Brimhall or Kobayashi when combined with Knudsen or Harrison or Laub, while claim 20 is rejected under the same statute in view of the combination of Knudsen or Harrison with either of Piramoon '669 or Piramoon '522.

Applicants respectfully traverse the rejections of these claims, and submit that these claims are allowable for at least the following reasons.

Applicants rely on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

Lack of Suggestion or Motivation to Modify or Combine the References

The Office Action does not identify where the prior art suggests the desirability of the claimed invention. MPEP § 2143.01, entitled *Suggestion or Motivation to Modify the References*, states that the “prior art *must* suggest the desirability of the claimed invention.” (Emphasis added; citations omitted.) It further states that obviousness

can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. ‘The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.’

(Citations omitted.)

In regard to the obviousness of combining Brimhall with Kobayashi to obtain the invention of claim 1, the Office Action simply states that “it would have been obvious . . . to modify the device of Brimhall to include the indexing means of Kobayashi for effectively and accurately stopping the centrifuging process.” (Office Action, Page 9, lines 3-5.) Nothing more is said in the Office Action regarding the obviousness of such a combination. Applicants respectfully submit that the Office Action fails to identify where in the prior art motivation for such a combination may be found.

Further, it is respectfully submitted that the Office Action does not provide a rationale as to why one of ordinary skill in the art would have been motivated to modify any of the references, and thus a *prima facie* case of obviousness has not been established. True, the Office Action states a result of general combination of the references. However, Applicants respectfully submit that a *result* is not the same as a *reason why* one of ordinary skill in the art would be motivated to combine the references, however desirable those results may be. If motivation to combine references to establish a *prima facie* case of obviousness could merely be satisfied by a result-oriented analysis of the prior art, the first requirement (and second requirement) of MPEP § 2143 would be completely vitiated. This is because by identifying references that teach each individual element of a claimed invention, implementation of the teachings of the cited references almost always necessarily provides results according to a given invention under examination. Indeed, such an analysis relies on impermissible circular reasoning.

In contrast to the result-oriented analysis proffered in the Office Action, the MPEP specifically states that “the prior art must suggest the desirability of the claimed invention.” The Office Action, in relying only on results, does not identify where the prior art suggests the desirability of a transmission according to the independent claims.

Still further, the Office Action appears to rely on the alleged ease by which the references can be combined, contrary to the procedures stipulated in the MPEP. The MPEP specifically states that the “mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” (MPEP § 2143.01, subsection 3, first sentence, citations omitted.)

Thus, because the Office Action does not identify where in the prior art motivation to combine the references may be found and because no reason why one of ordinary skill in the art would seek to combine the references is provided in the Office Action, a *prima facie* case of obviousness has not been established, and the claims are therefore allowable.

* * * * *

MPEP § 2143.01, subsection 6 states that “the proposed modification cannot change the principle of operation of a reference – If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810 (CCPA 1959).” In *Ratti*, the CCPA held that the “suggested combination of references would require a substantial reconstruction and redesign of the elements shown in the primary reference.” This substantial redesign would have resulted in changing a rigid seal to a resilient seal. Thus, a reference cannot be modified to render an invention obvious if the modification changes the principle of operation of the reference, **even if that modification is workable or easily implemented.**

With the above in mind, it is noted that claim 1 recites that “the device is adapted to automatically receive tubes (106) from the laboratory analyzer (2) and to automatically permit the laboratory analyzer to retrieve tubes (106) from the laboratory analyzer (2) to perform biological or chemical reactions.” In view of this recitation, it is respectfully submitted that since Birmhall teaches a manual operation of his device,¹ incorporating such automatic features into Birmhall would change the principle of operation of the Birmhall reference. Since modifying Birmhall to utilize an automatic tube loading and unloading feature changes the principle of operation of Birmhall, “the teachings of Birmhall are not sufficient to render the claims *prima facie* obvious.” Reconsideration of the claims rejected in view of the combination of Birmhall with Kobayashi is respectfully requested.

* * * * *

In regard to the obviousness of combining either of Birmhall or Kobayashi with Goodman to obtain the invention of claims 3 and 8, the rationale for combining these references fails to comport with MPEP § 2143.01. As with the rationale for combining Birmhall with Kobayashi, the rationale proffered in the Office Action for combining Birmhall or Kobayashi with Goodman presents a result of the combination, but fails to explain why one would be motivated to combine the references. Because a *prima facie* case of

¹ Birmhall specifically teaches manual loading and unloading of tubes in his device. See, e.g., Birmhall at col. 5, lines 8-9: the “operator places cover plate 16 on rotor shaft 18;” Birmhall at col. 4, lines 47-50: “the operator simply follows the instructions thus displayed on control panel 20 which includes inserting the centrifuge containers through index plate 32 into the appropriate receptacle sets.”

obviousness has not been established in regard to claims 3 and 8, the rejection of these claims should be withdrawn.

* * * * *

In regard to the obviousness of combining Kobayashi with Davidson to obtain the invention of claim 4, the rationale for combining these references also fails to comport with MPEP § 2143.01. As with the rationale for combining Birmhall with Kobayashi, the rationale proffered in the Office Action for combining Kobayashi with Davidson presents a result of the combination, but fails to explain why one would be motivated to combine the references. Because a *prima facie* case of obviousness has not been established in regard to claim 4, the rejection of this claim should be withdrawn.

The Cited References Do Not Suggest All Claim Recitations

Even if the first requirement of MPEP § 2143 was satisfied in the Office Action (which it is not, as explained above), the cited references still do not meet the third requirement for all of the claims, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Claims Rejected as Obvious in View of Kobayashi: As noted above, claims 1, 2, 4-7, 10-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Kobayashi (USP 5,322,497). These claims were also rejected in the alternative as being obvious in view of Kobayashi. In formulating the obviousness rejection of these claims based on Kobayashi, the Office Action does not identify where the missing recitations of claims 1 or claim 2 (as amended), identified in the above section regarding rejections under 35 U.S.C. §102(b) may be found in Kobayashi. Applicants respectfully submit that these missing recitations are not present in Kobayashi, and respectfully direct the reader to the above discussion regarding the lack of anticipation by Kobayashi of claims 1, 2, 4-7 and 10-14 (the contents of which are incorporated herein in the interests of brevity). Applicants further submit that it would not have been obvious to modify these missing recitations into Kobayashi for at least the reason that Kobayashi does not teach or suggest the missing recitations. Withdrawal of the rejections based solely in view of Kobayashi is respectfully requested.

Kobayashi in view of Davidson: Claim 4, now in independent form, includes the recitations of claim 1, as previously pending prior to the entry of the amendments of this paper (i.e., as examined). Applicants first note that claim 4 is rejected in view of the combination of Kobayashi and Davidson. Claim 8 is **not** rejected in view of the combination of Birmhall **with** Kobayashi and Davidson. As noted above, Kobayashi fails to teach each and every element of claim 1 (as pending prior to the above amendment). Davidson does not remedy the deficiencies Kobayashi. Therefore, since the recitations of claim 1 (prior to the above amendments) are not present in Kobayashi, the rejection of claim 4 in view of Kobayashi when combined with Davidson should be withdrawn.

Brimhall or Kobayashi in view of Goodman: Claim 8, now in independent form, includes the recitations of claim 1, as previously pending prior to the entry of the amendments of this paper (i.e., as examined). Applicants first note that claim 8 is rejected in view of the combination of Birmhall and Goodman and rejected in view of the combination of Kobayashi and Goodman. Claim 8 is **not** rejected in view of the combination of Birmhall **with** Kobayashi and Goodman. As noted above, Kobayashi fails to teach each and every element of claim 1, and as admitted in the Office Action, Birmhall does not disclose a means for indexing a plate. Goodman remedies the individual deficiencies of neither Birmhall nor Kobayahsi. Therefore, since the recitations of claim 1 (prior to the above amendments) are not present in the combination of Birmhall and Goodman or the combination of Kobayashi and Goodman, claim 8 is therefore allowable.

Claim 8 also recites that the device has a lid which closes the vessel and is mounted so as to pivot on the casing. The Office Action relies on Goodman to teach such a lid. Applicants respectfully submit that Goodman does not teach such a lid. The lid of Goodman is not described in sufficient detail to arrive at a conclusion that Goodman teaches the additional recitations of claim 8, and the Office Action does not identify where in Goodman such a descript teaching may be found, instead broadly alleging that the lid of Goodman meets the recitations of claim 8. Reconsideration of claim 8 is respectfully requested.

Brimhall or Kobayashi in view of Knudsen or Harrison: Claim 18, now in independent form, includes the recitations of claim 1, as previously pending prior to the entry

of the amendments of this paper (i.e., as examined). Applicants first note that claim 18 is rejected in view of the combination of Birmhall and either one of Knudsen or Harrison and rejected in view of the combination of Kobayashi and either one of Knudsen or Harrison. Claim 18 is **not** rejected in view of the combination of Birmhall **with** Kobayashi and either of Knudsen or Harrison. As noted above, Kobayashi fails to teach each and every element of claim 1, and as admitted in the Office Action, Birmhall does not disclose a means for indexing a plate. Knudsen and/or Harrison remedies the individual deficiencies of neither Birmhall nor Kobayahsi. Therefore, since the recitations of claim 1 (prior to the above amendments) are not present in the combination of Birmhall with Knudsen or Harrison or the combination of Kobayashi with Knudsen or Harrison, the rejection of claim 18 as obvious in view of these references as combined should be withdrawn.

Brimhall or Kobayashi in view of Laub: Claim 18, now in independent form, includes the recitations of claim 1, as previously pending prior to the entry of the amendments of this paper (i.e., as examined). Applicants first note that claim 18 is rejected in view of the combination of Birmhall with Laub and rejected in view of the combination of Kobayashi with Laub. Claim 18 is **not** rejected in view of the combination of Birmhall **with** Kobayashi and with Laub. As noted above, Kobayashi fails to teach each and every element of claim 1, and as admitted in the Office Action, Birmhall does not disclose a means for indexing a plate. Laub remedies the individual deficiencies of neither Birmhall nor Kobayahsi. Therefore, since the recitations of claim 1 (prior to the above amendments) are not present in the combination of Birmhall with Laub or the combination of Kobayashi with Laub, the rejection of claim 18 in view of the combination of Birmhall with Laub and the combination of Kobayashi with Laub should be withdrawn.

* * * * *

In sum, even if the first requirement of MPEP § 2143 is satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action for each and every claim, since the proffered combinations do not teach each and every element of the present invention.

New Claims

As seen above, claims 21-27 have been added. Claims 21-23 reflect claims 18-20 as pending prior to the present paper. Claim 24 duplicates claim 1 except that the means-plus-function language has been removed from the claim and replaced with non-means-plus-function language. Support for these claims may be found, among other places, in claims 18-20 and 1 of the application as filed. These claims are allowable for the pertinent reasons that make claims 18-20 and 1 allowable.

New claim 25 recites that “swing trays are mounted in the notches in such a way that the pivoting axis of said swing trays **is offset toward the center of the plate** relative to the vertical axis passing through the center of gravity of each swing tray.” (Emphasis added.) An exemplary embodiment of such a feature is explained at page 10, lines 6-15. According to such an embodiment, the trays may be configured such that the trays abut stops 104’a and 104’b of notches 104a and 104b of plate 104 once the plate has stopped rotating, thus providing a more stable and predictable stopping orientation that is not entirely dependent on the balance of the trays.

Kobayashi fails to describe this element. In Kobayashi, the alleged trays are mounted such that the pivot axis passes through the center of gravity of the trays, as may be clearly seen in the Figs. In every Fig., the trays are shown free-hanging at rest and symmetrically aligned with the axis of rotation of the trays. Thus, claim 25 is allowable.

Claim 26 is allowable due to its dependency from claim 25, and for the additional reason that claim 26 recites “through orifices that extend from the bottom of the horizontal plate to the top of the horizontal plate adapted for the mounting of tubes,” as well as recites that the device “is adapted to automatically receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions,” features identified above as imparting patentability on the claimed inventions. Claim 27 is allowable due to its dependency from claim 26, and because it recites that the device “is adapted to automatically receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions.”

Any Next Office Action Should Not Be A Final Office Action

Claim 9 was not rejected in view of the prior art. Applicants presume that claim 9 is clear of the prior art, as MPEP §2143.03 states that if “a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite . . . and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable.” (MPEP §2143.03, second paragraph.)

If claim 9 is not allowed and is rejected in view of the prior art in any next office action, Applicants respectfully submit that any next office action should be a **non-final** office action, as this would be the first time that claim 6 was rejected in view of the prior art.

* * * * *

As noted above, claim 1, prior to the above amendment, is allowable in view of Birmhall or Kobayahsi without combination because neither Birmhall nor Kobayahsi individually teach each and every element of claim 1. The amendments to claims 4, 8 and 18 merely serve to place these claims into independent form so that the amendments to claim 1 are not carried into these claims, and thus do not constitute an amendment that might necessitate a new grounds for rejection.

If these claims are not allowed and are rejected based on any new grounds of rejection in any next office action, Applicants respectfully submit that any next office action should be a **non-final** office action.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

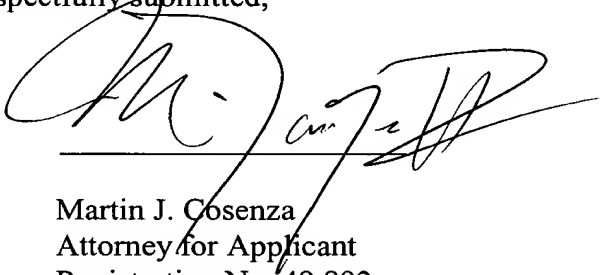
Examiner Quan is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date May 12, 2004

FOLEY & LARDNER LLP
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 295-4747
Facsimile: (202) 672-5399

By


Martin J. Cosenza
Attorney for Applicant
Registration No. 48,892

Appendix A

